CTIA points out that:

> Notably, many CMRS carriers have expended significant resources in recent months to build out their networks. In these situations, such firms may have excess capacity that permits them to increase their output in the near term while incurring relatively few additional costs. Under such circumstances, this is >precisely the situation in which economic analysis indicates that vigorous price competition is most likely, and that collusion is unlikely.=[38]

Companies= Motions for Generic Wireless Waivers). There is no reason to believe that the current RBOC sponsored econometric studies are any more accurate than the earlier ones.

[38]CTIA Comments at 8 (citing Besen and Burnett).

CTIA=s argument is in fact an argument for retaining the spectrum cap. Economic analysis indicates that in a concentrated market with significant barriers to entry, acquisition by an established firm of a new entrant with excess capacity will likely dampen competitive forces. In other words, CTIA can not rely on the presence in the market of a few firms with excess capacity as an excuse for eliminating a rule that would allow these very firms to be acquired by existing competitors.[39]

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[39]There is no question that barriers to entry in this market are high. Allocated spectrum is limited. If a new entrant or existing operator is acquired, there are no others waiting in the wings with available spectrum to enter if competition wanes. In addition, acquiring an existing carrier with a fairly developed network may also decrease the number of available antennae sites for a new entrant. While the number of independent site owners offering multi-tenant capacity is increasing, many of the more desirable hill-tops and roof-tops in urban areas are owned or leased on a long term basis by existing carriers. To the extent there is no single effective alternative to an existing carrier=s site, a new carrier (presuming they somehow find spectrum) may be forced

III. CONCLUSION

The 45 MHz spectrum cap continues to promote new investment, diverse services and the roll out of new competition in the mobile two-way voice communications market. As the Commission has only recently recognized and the subscriber data indicates, PCS licensees are still in the process of becoming full-fledged competitors to incumbent cellular operators. The Commission should not

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to erect multiple sites to achieve the same coverage. Thus, they would be at a cost disadvantage to the incumbent carrier.

Charles Jackson=s analysis for BAM argues if a significant amount of CMRS spectrum is consolidated, more CMRS spectrum would be quickly forthcoming. See, ACMRS Capacity: Expanded Use and Expanded Spectrum≅, Declaration of Dr. Charles L. Jackson, filed with the Comments of BAM. However, the particular spectrum bands discussed by Jackson are already being used by existing licensees that will not quickly or easily relinquish their rights. The time needed for rulemaking, spectrum allocation, and network construction could delay the entry of new competitors by five to ten years. This also presumes that CMRS licensees can make an effective case for additional spectrum over the needs of private mobile system operators, such as public safety entities, or those seeking spectrum for fixed services.

Finally, a number of comments noted that the spectrum cap could prevent CMRS carriers from implementing new services, in particular fixed access service for ILEC competition. There are a number of spectrum allocations available to CMRS carriers (LMDS, DEMS, 38 GHz and MMDS) suitable for fixed access purposes. Given how many larger CMRS carriers are also ILECs (including Bell Atlantic, GTE and SBC) it is doubtful that it is a shortage of spectrum that has kept them from instituting extensive wireless competitive local access.

change or modify the very market structure that makes this evolution to robust two-way voice competition possible. Clearly, the spectrum cap may impact the current courting between wireless companies. These private business desires to consolidate broadband voice markets should not, however, serve as a reason to short circuit Commission efforts to create new, independent and viable PCS networks.

Respectfully submitted,

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ATTACHMENT A

MARKET DATA REPORT

for
PCIA

Revised 1-1-99

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PCIA Subscriber Estimates

MSA / CMSA	Wireless: Voice: Basic Service PCS subs (M)	Wireless: SMR/ ESMR subs (M)	Wireless: Voice: Basic Service Cellular subs (M)	PCS + SMR + Cellular subs (M)	% PCS of Total
Hartford, CT	0.0000	0.017	0.267	0.284	0.0%
Grand Rapids-Muskegon-Holland, MI	0.0000	0.020	0.243	0.263	0.0%
Harrisburg-Lebanon-Carlisle, PA	0.0000	0.010	0.148	0.158	0.0%
Allentown-Bethlehem-Easton, PA	0.0000	0.008	0.134	0.142	0.0%
Springfield, MA	0.0000	0.009	0.134	0.142	0.0%
Youngstown-Warren, OH	0.0000	0.009	0.131	0.140	0.0%
Sarasota-Bradenton, FL	0.0000	0.007	0.122	0.129	0.0%
Stockton-Lodi, CA	0.0000	0.008	0.118	0.127	0.0%
Colorado Springs, CO	0.0000	0.007	0.113	0.120	0.0%
Lancaster, PA	0.0000	0.008	0.111	0.119	0.0%
Fort Wayne, IN	0.0000	0.007	0.112	0.119	0.0%
Daytona Beach, FL	0.0000	0.014	0.097	0.112	0.0%
Shreveport-Bossier City, LA	0.0000	0.008	0.098	0.106	0.0%
Kalamazoo-Battle Creek, MI	0.0000	0.007	0.097	0.104	0.0%
Lakeland-Winter Haven, FL	0.0000	0.006	0.097	0.104	0.0%
Melbourne-Titusville-Palm Bay, FL	0.0000	0.005	0.096	0.102	0.0%
Lexington, KY	0.0000	0.006	0.095	0.101	0.0%
Fort Myers-Cape Coral, FL	0.0000	0.006	0.094	0.100	0.0%
York, PA	0.0000	0.006	0.089	0.095	0.0%
Lansing-East Lansing, MI	0.0000	0.006	0.087	0.092	0.0%
Davenport-Moline-Rock Island, IA-IL	0.0000	0.006	0.085	0.091	0.0%
Rockford, IL	0.0000	0.006	0.085	0.091	0.0%
Reading, PA	0.0000	0.006	0.084	0.090	0.0%
Beaumont-Port Arthur, TX	0.0000	0.006	0.080	0.085	0.0%
Pensacola, FL	0.0000	0.005	0.078	0.083	0.0%
Salinas, CA	0.0000	0.005	0.077	0.082	0.0%
Saginaw-Bay City-Midland, MI	0.0000	0.005	0.077	0.082	0.0%
Springfield, MO	0.0000	0.006	0.075	0.081	0.0%
Santa Barbara-St. Maria-Lompoc, CA	0.0000	0.004	0.077	0.081	0.0%
	Wireless: Voice: Basic	Wireless: SMR/ ESMR	Wireless: Voice: Basic	PCS + SMR + Cellular	% PCS of Total

	Service PCS		Service Cellular		
Evansville-Henderson, IN-KY	0.0000	0.005	0.075	0.080	0.0%
Peoria-Pekin, IL	0.0000	0.005	0.075	0.079	0.0%
Corpus Christi, TX	0.0000	0.005	0.073	0.078	0.0%
Utica-Rome, NY	0.0000	0.004	0.069	0.073	0.0%
Fort Pierce-Port St. Lucie, FL	0.0000	0.004	0.066	0.070	0.0%
Binghamton, NY	0.0000	0.004	0.066	0.070	0.0%
Visalia-Tulare-Porterville, CA	0.0000	0.004	0.064	0.068	0.0%
Charleston, WV	0.0000	0.004	0.062	0.067	0.0%
Huntington-Ashland, WV-KY-OH	0.0000	0.004	0.061	0.065	0.0%
Roanoke, VA	0.0000	0.004	0.060	0.064	0.0%
Elkhart-Goshen, IN	0.0000	0.005	0.059	0.064	0.0%
Erie, PA	0.0000	0.004	0.058	0.062	0.0%
New London-Norwich, CT	0.0000	0.004	0.057	0.060	0.0%
South Bend, IN	0.0000	0.004	0.057	0.060	0.0%
Ocala, FL	0.0000	0.004	0.054	0.058	0.0%
Fort Collins-Loveland, CO	0.0000	0.003	0.053	0.057	0.0%
Barnstable-Yarmouth, MA	0.0000	0.003	0.051	0.055	0.0%
Odessa-Midland, TX	0.0000	0.003	0.051	0.054	0.0%
Provo-Orem, UT	0.0000	0.003	0.050	0.053	0.0%
San Luis Obispo-Antascadro-Paso Rbles,CA	0.0000	0.003	0.050	0.052	0.0%
Killeen-Temple, TX	0.0000	0.003	0.050	0.052	0.0%
Naples, FL	0.0000	0.004	0.048	0.052	0.0%
Lubbock, TX	0.0000	0.003	0.048	0.052	0.0%
Amarillo, TX	0.0000	0.003	0.048	0.051	0.0%
Lynchburg, VA	0.0000	0.003	0.047	0.050	0.0%
Waco, TX	0.0000	0.003	0.046	0.049	0.0%
Yakima, WA	0.0000	0.003	0.046	0.049	0.0%
Longview-Marshall, TX	0.0000	0.003	0.045	0.048	0.0%
Springfield, IL	0.0000	0.003	0.045	0.048	0.0%
Johnstown, PA	0.0000	0.002	0.042	0.045	0.0%
Medford-Ashland, OR	0.0000	0.003	0.041	0.044	0.0%
Chico-Paradise, CA	0.0000	0.002	0.041	0.043	0.0%
Tyler, TX	0.0000	0.003	0.040	0.042	0.0%
Topeka, KS	0.0000	0.003	0.040	0.042	0.0%
St. Cloud, MN	0.0000	0.003	0.038	0.041	0.0%
	Wireless: Voice: Basic Service PCS	**Wireless: SMR/ ESMR**	**Wireless: Voice: Basic Service Cellular**	**PCS + SMR + Cellular**	**% PCS of Total**
Mansfield, OH	0.0000	0.002	0.038	0.041	0.0%
Champaign-Urbana, IL	0.0000	0.003	0.038	0.040	0.0%

Joplin, MO	0.0000	0.003	0.036	0.039	**0.0%**
Lake Charles, LA	0.0000	0.002	0.036	0.038	**0.0%**
Richland-Kennewick-Pasco, WA	0.0000	0.002	0.036	0.038	**0.0%**
Merced, CA	0.0000	0.002	0.036	0.038	**0.0%**
Parkersburg-Marietta, WV-OH	0.0000	0.002	0.035	0.038	**0.0%**
Lima, OH	0.0000	0.002	0.035	0.038	**0.0%**
Jamestown, NY	0.0000	0.002	0.035	0.037	**0.0%**
Bellingham, WA	0.0000	0.002	0.035	0.037	**0.0%**
Santa Fe, NM	0.0000	0.002	0.035	0.037	**0.0%**
Benton Harbor, MI	0.0000	0.003	0.034	0.037	**0.0%**
Houma, LA	0.0000	0.002	0.034	0.037	**0.0%**
Redding, CA	0.0000	0.002	0.034	0.036	**0.0%**
Sioux City, IA-NE	0.0000	0.003	0.033	0.035	**0.0%**
Fort Walton Beach, FL	0.0000	0.002	0.033	0.035	**0.0%**
Janesville-Beloit, WI	0.0000	0.002	0.033	0.035	**0.0%**
Lafayette, IN	0.0000	0.002	0.033	0.035	**0.0%**
Pittsfield, MA	0.0000	0.002	0.032	0.034	**0.0%**
Clarksville-Hopkinsville, TN-KY	0.0000	0.002	0.032	0.034	**0.0%**
Wausau, WI	0.0000	0.002	0.031	0.033	**0.0%**
Rocky Mount, NC	0.0000	0.002	0.030	0.033	**0.0%**
Eau Claire, WI	0.0000	0.002	0.030	0.032	**0.0%**
Charlottesville, VA	0.0000	0.002	0.030	0.032	**0.0%**
Terre Haute, IN	0.0000	0.002	0.030	0.032	**0.0%**
Glens Falls, NY	0.0000	0.002	0.029	0.031	**0.0%**
Rochester, MN	0.0000	0.002	0.029	0.031	**0.0%**
Decatur, AL	0.0000	0.002	0.029	0.031	**0.0%**
Laredo, TX	0.0000	0.002	0.029	0.031	**0.0%**
La Crosse, WI-MN	0.0000	0.002	0.029	0.031	**0.0%**
Altoona, PA	0.0000	0.002	0.029	0.031	**0.0%**
Monroe, LA	0.0000	0.002	0.029	0.031	**0.0%**
Jackson, MI	0.0000	0.002	0.028	0.030	**0.0%**
Decatur, IL	0.0000	0.002	0.028	0.030	**0.0%**
Steubenville-Weirton, OH-WV	0.0000	0.002	0.028	0.030	**0.0%**
Bloomington-Normal, IL	0.0030	0.002	0.031	0.036	**8.5%**

	Wireless: Voice: Basic Service PCS	**Wireless: SMR/ ESMR**	**Wireless: Voice: Basic Service Cellular**	**PCS + SMR + Cellular**	**% PCS of Total**
W. Palm Bch-Boca Raton, FL	0.0243	0.013	0.234	0.272	**8.9%**
Brownsville-Harlingen-San Benito, TX	0.0050	0.003	0.046	0.054	**9.2%**
Mcallen-Edinburg-Mission, TX	0.0074	0.004	0.068	0.080	**9.2%**
Appleton-Oshkosh-Neenah,	0.0114	0.008	0.096	0.115	**9.9%**

WI					
Madison, WI	0.0122	0.007	0.103	0.122	**10.0%**
Bakersfield, CA	0.0143	0.007	0.121	0.142	**10.0%**
Fresno, CA	0.0207	0.012	0.174	0.207	**10.0%**
Nashville, TN	0.0325	0.017	0.269	0.319	**10.2%**
Florence, AL	0.0038	0.002	0.028	0.034	**11.4%**
Dothan, AL	0.0040	0.002	0.029	0.035	**11.5%**
Mobile, AL	0.0145	0.006	0.105	0.126	**11.5%**
Tuscaloosa, AL	0.0044	0.002	0.032	0.039	**11.5%**
Montgomery, AL	0.0092	0.004	0.066	0.080	**11.6%**
Huntsville, AL	0.0096	0.004	0.069	0.083	**11.6%**
Las Vegas, NV-AZ	0.0405	0.018	0.285	0.343	**11.8%**
Sheboygan, WI	0.0046	0.002	0.031	0.038	**12.0%**
Green Bay, WI	0.0091	0.005	0.061	0.075	**12.1%**
Reno, NV	0.0119	0.005	0.081	0.098	**12.2%**
NY-N. NJ-Long Island, NY-NJ-CT-PA	0.6595	0.298	4.438	5.395	**12.2%**
Chattanooga, TN-GA	0.0162	0.008	0.108	0.132	**12.3%**
Scranton-Wilkes-Barre-Hazleton, PA	0.0216	0.010	0.143	0.174	**12.4%**
Panama City, FL	0.0046	0.002	0.030	0.036	**12.7%**
Greensboro-Winston Salem-High Point, NC	0.0475	0.019	0.305	0.372	**12.8%**
Tucson, AZ	0.0243	0.009	0.155	0.189	**12.9%**
Charlotte-Gastonia-Rock Hill, NC-SC	0.0499	0.020	0.316	0.386	**12.9%**
Modesto, CA	0.0151	0.006	0.095	0.117	**13.0%**
Sacramento-Yolo, CA	0.0582	0.021	0.368	0.447	**13.0%**
San Diego, CA	0.0885	0.032	0.558	0.678	**13.0%**
Gainesville, FL	0.0063	0.003	0.039	0.048	**13.1%**
Phoenix-Mesa, AZ	0.1033	0.044	0.643	0.791	**13.1%**
Tallahassee, FL	0.0085	0.003	0.053	0.065	**13.1%**
San Francisco-Oakland-San Jose, CA	0.2553	0.098	1.581	1.934	**13.2%**
El Paso, TX	0.0205	0.008	0.125	0.154	**13.3%**

	Wireless: Voice: Basic Service PCS	**Wireless: SMR/ ESMR**	**Wireless: Voice: Basic Service Cellular**	**PCS + SMR + Cellular**	**% PCS of Total**
Wichita, KS	0.0198	0.008	0.120	0.147	**13.5%**
Tulsa, OK	0.0297	0.012	0.179	0.220	**13.5%**
Asheville, NC	0.0073	0.003	0.044	0.054	**13.5%**
Austin-San Marcos, TX	0.0404	0.016	0.241	0.297	**13.6%**
Houston-Galveston-Brazoria, TX	0.1630	0.066	0.967	1.195	**13.6%**
Wilmington, NC	0.0068	0.002	0.041	0.050	**13.7%**

Fayetteville, NC	0.0093	0.003	0.055	0.068	**13.7%**
Hickory-Morganton-Lenoir, NC	0.0149	0.007	0.087	0.109	**13.7%**
Columbus, GA-AL	0.0088	0.003	0.052	0.064	**13.7%**
Norfolk-Virginia Beach-Newprt News,VA-N	0.0545	0.019	0.323	0.396	**13.8%**
Los Angeles-Riverside-Orange County, CA	0.5163	0.195	3.032	3.743	**13.8%**
Atlanta, GA	0.1477	0.052	0.864	1.064	**13.9%**
Richmond-Petersburg, VA	0.0411	0.016	0.237	0.295	**14.0%**
Raleigh-Durham-Chapel Hill, NC	0.0387	0.014	0.225	0.277	**14.0%**
Johnson City-Kingsport-Bris., TN-VA	0.0179	0.007	0.102	0.127	**14.1%**
Cleveland-Akron, OH	0.1199	0.046	0.684	0.850	**14.1%**
Boston-Worcester-Lawrence, MA-NH-ME-CT	0.2540	0.102	1.440	1.796	**14.1%**
Eugene-Springfield, OR	0.0117	0.004	0.066	0.082	**14.3%**
Macon, GA	0.0113	0.004	0.063	0.079	**14.3%**
Canton-Massillon, OH	0.0154	0.005	0.087	0.108	**14.3%**
Augusta-Aiken, GA-SC	0.0102	0.003	0.058	0.071	**14.3%**
Savannah, GA	0.0107	0.004	0.060	0.074	**14.4%**
Knoxville, TN	0.0252	0.009	0.141	0.175	**14.4%**
Athens, GA	0.0053	0.002	0.029	0.036	**14.5%**
Toledo, OH	0.0265	0.010	0.145	0.182	**14.5%**
Memphis, TN-AR-MS	0.0389	0.014	0.214	0.268	**14.5%**
Columbus, OH	0.0613	0.022	0.337	0.420	**14.6%**
Lafayette, LA	0.0140	0.005	0.077	0.096	**14.6%**
Baton Rouge, LA	0.0220	0.008	0.120	0.149	**14.7%**
Seattle-Tacoma-Bremerton, WA	0.1405	0.046	0.765	0.951	**14.8%**
Birmingham, AL	0.0351	0.011	0.190	0.236	**14.8%**
Dayton-Springfield, OH	0.0401	0.005	0.223	0.268	**15.0%**
Washington-Baltimore, DC-MD-VA-WV	0.2820	0.090	1.495	1.866	**15.1%**

	Wireless: Voice: Basic Service PCS	**Wireless: SMR/ ESMR**	**Wireless: Voice: Basic Service Cellular**	**PCS + SMR + Cellular**	**% PCS of Total**
Salt Lake City-Ogden, UT	0.0508	0.018	0.263	0.333	**15.3%**
Minneapolis-St. Paul, MN-WI	0.1458	0.051	0.721	0.917	**15.9%**
Duluth-Superior, MN-WI	0.0106	0.004	0.052	0.066	**15.9%**
Spokane, WA	0.0181	0.006	0.089	0.113	**16.0%**
Portland-Salem, OR-WA	0.0952	0.030	0.469	0.594	**16.0%**
Chicago-Gary-Kenosha, IL-IN-WI	0.4208	0.143	2.031	2.594	**16.2%**

Cincinnati-Hamilton, OH-KY-IN	0.0910	0.029	0.440	0.560	**16.3%**
Tampa-St. Petersburg-Clearwater, FL	0.1041	0.030	0.505	0.639	**16.3%**
Miami-Fort Lauderdale, FL	0.1602	0.050	0.759	0.969	**16.5%**
Denver-Boulder-Greeley, CO	0.1230	0.039	0.582	0.744	**16.5%**
Orlando, FL	0.0742	0.024	0.350	0.448	**16.5%**
Jacksonville, FL	0.0506	0.017	0.237	0.304	**16.6%**
St. Louis, MO-IL	0.1272	0.038	0.593	0.759	**16.8%**
Lincoln, NE	0.0120	0.004	0.056	0.071	**16.8%**
Philadelphia-Wil-Atl Cty, PA-NJ-DE-MD	0.2554	0.072	1.180	1.508	**16.9%**
San Antonio, TX	0.0659	0.019	0.301	0.386	**17.1%**
Omaha, NE-IA	0.0366	0.012	0.166	0.214	**17.1%**
Oklahoma City, OK	0.0504	0.015	0.228	0.293	**17.2%**
Dallas-Fort Worth, TX	0.2498	0.075	1.113	1.438	**17.4%**
Las Cruces, NM	0.0066	0.002	0.029	0.037	**17.5%**
Albuquerque, NM	0.0355	0.010	0.153	0.199	**17.9%**
Milwaukee-Racine, WI	0.0957	0.029	0.407	0.531	**18.0%**
Detroit-Ann Arbor-Flint, MI	0.2947	0.073	1.251	1.619	**18.2%**
Buffalo-Niagara Falls, NY	0.0716	0.019	0.291	0.382	**18.8%**
Syracuse, NY	0.0460	0.012	0.185	0.243	**18.9%**
Albany-Schenectady-Troy, NY	0.0571	0.015	0.229	0.301	**19.0%**
Rochester, NY	0.0664	0.017	0.265	0.349	**19.0%**
Cedar Rapids, IA	0.0118	0.003	0.045	0.060	**19.5%**
Kansas City, MO-KS	0.1141	0.030	0.425	0.569	**20.1%**
New Orleans, LA	0.0809	0.018	0.277	0.376	**21.5%**
Pittsburgh, PA	0.1498	0.030	0.497	0.677	**22.1%**
Louisville, KY-IN	0.0717	0.015	0.232	0.319	**22.5%**
Indianapolis, IN	0.1149	0.022	0.347	0.484	**23.7%**
Des Moines, IA	0.0355	0.007	0.102	0.145	**24.5%**

KEY ASSUMPTIONS

Sources Consulted: Solomon Smith Barney "Mobile Metrics" Spring 1998, DLJ "Wireless Communications" 11-98, FCC WTB Database 1-5-99 update to PCS Buildout Schedule, ATIVA Research Tools, Equifax, 1998 Multimedia Telecommunications Market Review (MMTA), RC

ATTACHMENT B

COMPARISON OF SUBSCRIBER LEVELS IN LARGEST CELLULAR MSAS*

Cellular MSA		Estimated Cellular Subscribers (mill.)	Cellular Subs. As A % Of Total Market Cellular/PCS Subs.	Estimated PCS Subscribers (mill.)
1	Los Angeles	2.5	84%	0.4
2	New York	1.9	84%	0.3
3	Chicago	1.8	83%	0.3
4	Miami	1.4	93%	0.1
5	Wash/Balt.	1.3	77%	0.3
6	San Francisco	1.2	83%	0.2
7	Detroit	1.1	93%	0.08
8	Philadelphia	1.1	93%	0.08
9	Boston	1.1	94%	0.07
10	Atlanta	1.0	90%	0.1
11	Dallas	0.9	78%	0.2
12	Houston	0.9	89%	0.1
13	Seattle	0.7	91%	0.06
14	San Diego	0.6	85%	0.09**
15	Phoenix	0.6	93%	0.04
16	Tampa	0.6	90%	0.06
17	Minneapolis	0.6	92%	0.05
18	Denver	0.6	87%	0.08
19	St. Louis	0.5	92%	0.04
20	Sacramento	0.5	90%	0.05**

* - All Subscriber Estimates from RCR Magazine 1998 Top 20 List, December 28, 1998
All Estimates Rounded

** - Does not appear in RCR ranking of Top 40 PCS markets. Estimate taken from Telecompetition estimates

QUALIFICATIONS OF HAI CONSULTING, INC.
ALAN J. BOYER AND DANIEL KELLEY

1. We have been asked by the Personal Communications Industry Association (APCIA≅) to address arguments raised in the comments in WT Docket No. 98-205.

1. QUALIFICATIONS

2. Alan J. Boyer is a Senior Consultant at HAI Consulting, Inc.(AHAI≅), of Boulder Colorado. He received a Bachelor of Arts degree in Business Administration from San Francisco State University in 1978 and attended the graduate telecommunications program at the University of Colorado. His professional experience includes ten years with Fidelity Investments in Boston, spent principally with their wireless communications subsidiary Advanced MobileComm, Inc. (AMI). While with AMI he oversaw regulatory affairs, directing their participation in a number of Commission proceedings including the development of PCS rules. Since joining HAI, he has performed critical analysis and cost modeling for a number of different wireless segments, including PCS, AMPs, SMR and LMDS. His resume is attached.

3. Daniel Kelley is Senior Vice President of HAI Consulting, Inc. He received a Bachelor of Arts degree in Economics from the University of Colorado in 1969, a Master of Arts degree in Economics from the University of Oregon in 1971 and a Ph.D. in Economics from the University of Oregon in 1976. His professional experience began in 1972 at the Antitrust Division of the U.S. Department of Justice where he analyzed mergers, acquisitions and business practices in a number of industries, including telecommunications. While at the Department of Justice, he was a member of the U.S. v. AT&T economics staff. In 1979, he moved to the Federal Communications Commission ("FCC") where he held positions as Senior Economist in the Common Carrier Bureau

and the Office of Plans and Policy, and also served as Special Assistant to the Chairman. After leaving the FCC, he was a Project Manager and Senior Economist at ICF, Incorporated, a public policy consulting firm. From September 1984 through July of 1990, he was employed by MCI Communications Corporation as its Director of Regulatory Policy. He has conducted economic and policy studies on a wide variety of telecommunications issues, including local exchange competition, dominant firm regulation, cellular radio competition and the cost of local service. He has filed papers or Declarations in the Commission=s PCS auction proceeding, and in the PCS licensing proceeding. He has advised foreign government officials on telecommunications policy matters and has taught seminars in regulatory economics in a number of countries.

4. He has testified on telecommunications issues before this Commission, the California, Colorado, Connecticut, Florida, Georgia, Hawaii, Maryland, Massachusetts, Michigan, New York, Oregon, Pennsylvania and Utah Commissions, as well as the Federal-State Joint Board investigating universal service reform. His resume is attached

STATEMENT OF QUALIFICATIONS

Daniel Kelley

PROFESSIONAL EXPERIENCE:

Senior Vice President, HAI Consulting, Inc., Boulder Colorado (current position).
Conducting economic and applied policy analysis of domestic and international telecommunications public policy and business issues. Recent projects have included advising Central and Eastern European Governments on privatization and competition matters, assisting a private client with entry into the long distance market in Mexico, analyzing competitive conditions in cellular radio markets, analyzing the economics of cable television regulation, analyzing the prospects for local competition and measuring the economic cost of local service.

Director of Regulatory Policy, MCI Communications Corporation, 1984-1990.
Responsible for developing and implementing MCI's public policy positions on issues such as dominant carrier regulation, Open Network Architecture, accounting separations and Bell Operating Company line of business restrictions. Also managed an interdisciplinary group of economists, engineers and lawyers engaged in analyzing AT&T and local telephone company tariffs.

Senior Economist and Project Manager, ICF Incorporated, 1982-1984.
Telecommunications and antitrust projects included: forecasting long distance telephone rates; analysis of the competitive effects of AT&T's long distance rate structures; a study of optimal firm size for cellular radio markets; analysis of the FCC's Financial Interest and Syndication Rules, and competitive analysis of mergers and acquisitions in a variety of industries.

Senior Economist, Federal Communications Commission, 1979-1982.
Served as Special Assistant to the Chairman during 1980-1981. Advised the Chairman on proposed regulatory changes in the broadcasting, cable television and telephone industries; analyzed legislation and drafted Congressional testimony. Coordinated Bureau and Office efforts on major common carrier matters such as the Second Computer Inquiry and the Competitive Carrier Rulemaking. Also held Senior Economist positions in the Office of Plans and Policy and the Common Carrier Bureau.

Staff Economist, U.S. Department of Justice, 1972-1979.
Analyzed proposals for restructuring the Bell System as a member of the economic staff of U.S. v. AT&T; investigated the competitive effects of mergers and business practices in a wide variety of industries.

EDUCATION:

1976	Ph.D. in Economics	University of Oregon
1971	M.A. in Economics	University of Oregon
1969	B.A. in Economics	University of Colorado

PUBLICATIONS AND COMPLETED RESEARCH:

"Cable and Wireless Alternatives to Residential Local Exchange Service," Berkeley Conference on Convergence and Digital Technology (1997), with Alan J. Boyer and David M. Nugent.

"A General Approach to Local Exchange Carrier Pricing and Interconnection Issues," Telecommunications Policy Research Conference, (1992), with Robert A. Mercer.

"Gigabit Networks: Is Access a Problem?" IEEE Gigabit Networking Workshop (1992).

"Advances in Network Technology" in Barry Cole, ed., After the Break-Up: Assessing the New Post-AT&T Divestiture Era (1991).

"Alternatives to Rate of Return Regulation: Deregulation or Reform?" in Alternatives to Rate Base Regulation in the Telecommunications Industry, NARUC (1988).

"AT&T Optional Calling Plans: Promotional or Predatory" in Harry M. Trebing, ed., Impact of Deregulation and Market Forces on Public Utilities: The Future Role of Regulation (1985).

_____"The Economics of Copyright Controversies in Communications" in Vincent Mosco, ed., Policy Research in Telecommunications (1984).

"Deregulation After Divestiture: The Effect of the AT&T Settlement on Competition," FCC, OPP Working Paper No. 8 (1982).

"The Transition to Structural Telecommunications Regulation," in Harry M. Trebing, ed., New Challenges for the 1980's (1982), with Charles D. Ferris.

"Social Objectives and Competition in Common Carrier Communications: Incompatible or Inseparable?" in Harry M. Trebing ed., Communications and Energy in Transition (1981), with Nina W. Cornell and Peter R. Greenhalgh.

"An Empirical Survey of Price Fixing Conspiracies," Journal of Law and Economics (1974), with George A. Hay. Reprinted in Siegfried and Calvari, ed., Economic Analysis and Antitrust Law (1978) and the Journal of Reprints for Antitrust Law and Economics (1980).

TESTIMONY:

Federal Communications Commission, Application of Cellular Communications of Cincinnati, July 25, 1983 (with Robert J. Reynolds): Optimum firm size in the cellular radio market

Maryland Public Service Commission, Case No. 0450-Phase II, May 31, 1983: Access charge implementation issues

New York Public Service Commission, Case No. 28425, June 1983: Access charge implementation issues

Florida Public Service Commission, Docket No. 820537-TP, June 30, 1983, November 4, 1983, April 9, 1984, June 4, 1984, September 7, 1984, October 25, 1984 and August 15, 1985: Access charge implementation issues

Pennsylvania Public Utility Commission, Docket No. R-832, August 5, 1983: Pennsylvania Bell Rate Case

New Jersey Board of Public Utilities, Docket No. 83-11, February 20, 1984: Access charge implementation issues

New York Public Service Commission, Case 88-C-102, March 2, 1990: Alternative Operator Service Issues

California Public Service Commission, A.90-07-015, July 10, 1990: AT&T Deregulation

---

New York Public Service Commission, Case 28425, October 8, 1990: IntraLATA Dial 1 Competition

Massachusetts Department of Public Utilities, DPU 90-133, October 17, 1990: AT&T Deregulation

Georgia Public Service Commission, 3905-U, November 16, 1990: Incentive Regulation

California Public Service Commission, I-87-11-033, September 23, 1991: IntraLATA Competition

Georgia Public Service Commission, Docket No. 3987-U, January 31, 1992: Cross-Subsidy

Colorado Public Utilities Commission, Docket No. 92R-050T, August 24, 1992: Collocation

Connecticut Department of Public Utility Control, Docket No. 9106-10-06, September 25, 1992:

Infrastructure
Maryland Public Service Commission, Case No. 8584, Phase II, July 21, 1995: Local Competition.

Connecticut Department of Public Utility Control, Docket No. 95-06-17, September 8, 1995: Local Competition .

Federal-State Joint Board on Universal Service, CC Docket No. 96-45, June 5, 1996: Cost Modeling.

Colorado Public Utilities Commission, Docket No. 96A-287T, September 6, 1996: Arbitration.

Oregon Public Service Commission, Dockets ARB 3 & 6, October 14, 1996: Arbitration.

Hawaii Public Utilities Commission, October 17, 1996: Arbitration.

Michigan Public Service Commission, October 24, 1996: Arbitration.

New York Public Service Commission, Case No. 28425, May 9, 1997: Access charges.

Colorado Public Utilities Commission, Docket No. 97F-175T, July 18, 1997: Access Charges.

Utah Public Service Commission, Docket No. 97-049-08, October 2, 1997: Access charges.

Connecticut Department of Public Utility Control, Docket No. 96-04-07, February 10, 1998; Access Charges.

ALAN J. (JOE) BOYER

HAI Consulting, Inc.
Senior Consultant **March 1996 B Present**
Integrating industry, regulatory and technical experience, analysis and recommendations have been provided to a variety of telecommunications industry participants. Clients have included AT&T, MCI, CableLabs and PBS. Specializing in wireless topics, projects have included business and economic modeling, business plan creation, FCC spectrum auction management, and due diligence for acquisitions and financial offerings.

Fidelity Capital Telecommunications and Technology Group,
Advanced MobileComm, Inc. **Boston, MA**
Director, Spectrum and Technology Planning **June 1991 B March 1996**
Director of Research **January 1987 - June 1991**
Senior member of the management team within the Telecommunications and Technology Group of Fidelity Capital, a wholly owned subsidiary of Fidelity Investments. Responsible for a range of regulatory, business development, and strategic planning functions focusing on developing wireless and wireline business opportunities. During the period covered, was actively involved in cellular, PCS and SMR projects.

Fidelity Systems Company, **Boston, MA**
Senior Communications Analyst **January 1986 - January 1987**
Principal analyst in Fidelity=s Voice Engineering Group during a major expansion of telecommunication systems supporting Fidelity Investment's financial services business.

General Telephone of California, **Long Beach, CA**
Various Positions **June 1978 - August 1984**
Performed various supervisory and craft roles in Special Services and Operator Services.

EDUCATION
California State University, San Francisco
BA, with Honors, in Business Administration granted 1978. Emphasis in International Finance
University of Colorado, Boulder
Course work completed for MS in Telecommunications, 1984-85.

Papers and Lectures/Presentations
AEnduring Local Bottleneck II≅ (ELB II), 1997, with Daniel Kelley and David Nugent.

Spectrum Management in the United States, University of Colorado, Boulder CO, June 1998

Broadband Access, The New Frontier of Local Access Competition, Second Annual Telecommunications Law Conference, Austin TX, April 1998.

The FCC Auction Process, PCIA Part 90 Educational Session, Las Vegas NV, April 1998.

Local Exchange and Broadband Access Competition B Work in Progress, Texas Telecom Summit, Austin TX, December 1997.

PCS as a Wireless Alternative to Residential Local Exchanges Service, Telecommunications Policy Research Conference, Alexandria VA, September 1997.

Bytes in Flight B Broadband Wireless Services, Boulder Chamber of Commerce Technology Brown Bag, Boulder CO, August 1997.

Wireless Local Loop In the United States, Frost and Sullivan Fourth Annual Outlook For the Mobile Communications Industry, Dallas TX, January 1997.

PCS Technology and Market Overview, Association of Colorado Telecommunications Professionals, Denver CO, December 1996.

[redacted]

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March 26, 1999

BY HAND DELIVERY

Ms. Magalie R. Salas
Secretary
Federal Communications Commission
The Portals
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Notice of Ex Parte Communication Regarding Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54

Dear Ms. Salas:

Yesterday, on behalf of the Telecommunications Resellers Association ("TRA"), the undersigned of Hogan and Hartson L.L.P.and David Gusky, Executive Vice President, TRA, met with Thomas Sugrue, Chief, Wireless Telecommunications Bureau; Diane Cornell, Deputy Chief, Wireless Telecommunications Bureau; and Nancy Boocker and Walter Strack of the Wireless Telecommunications Bureau regarding the referenced proceedings.

In the meeting, TRA discussed its position regarding the importance of unrestricted wireless resale to a competitive wireless and full service market. TRA also discussed the importance of Commission enforcement of the current resale obligation and the need to eliminate any sunset of the resale requirement.

The attached handout was distributed and discussed at the meeting. The handout explains why the Commission should retain its requirement that carriers permit resale of bundled packages of wireless service and equipment. TRA also discussed the points made in the November 13, 1998, letter to Chairman William Kennard from David Gusky of TRA filed in the referenced docket.

TRA also distributed and discussed the enclosed reply comments of the Personal Communications Industry Association (PCIA) in WT Docket No. 98-205, et al., filed Feb. 10, 1999, which we hereby file for inclusion in the record of the referenced proceeding (CC Docket No.94--54). In its reply comments, PCIA opposed the lifting of the commercial mobile radio services spectrum cap. PCIA cited data showing that the PCS

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March 26, 1999

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